

Summary of Testimony of Jeffrey R. Holzschuh
Vice-Chairman, Institutional Securities
Morgan Stanley
Before the House Subcommittee on Energy and Air Quality
Committee on Energy and Commerce
March 27, 2007

Morgan Stanley is a leading global financial services firm, with over 600 offices in 31 countries, 57,000 employees and over \$600 billion in assets under management. We have long been involved with energy, commodities and advising our clients across industry sectors in key markets around the globe. As climate change and greenhouse gas emissions concerns have increased over the years, we have been instrumental in helping shape emissions trading markets and in advising clients on sound and pro-active business, economic, financial and environmental strategies across the globe.

As a global firm, we have increasingly realized the importance of reducing global greenhouse emissions, both in the developed and developing world. Our extensive experience in energy markets, trading and advising clients have provided us with ample information regarding greenhouse gas emissions and provides an opportunity to give a few opinions on developing countries and their steps to reduce greenhouse gas emissions, including how the U.S. and other developed nations are impacting this issue. Those opinions are summarized as:

- China's projected energy demand over the next twenty years will be far more than any other developing country, with India's energy demand, in comparison, to be only one-third of China's.
- Chinese greenhouse gas emissions growth is primarily due to its use of coal, which is its most abundant energy source. Over the next twenty years, China and India are estimated to account for nearly 80% of the incremental increase in coal consumption globally. We need to enable these countries to be more efficient in their coal power generation, including using the best clean coal technologies, in order to help slow the growth in global greenhouse gas emissions.
- With China now planning its first national strategy to reduce greenhouse gas emissions, we need to encourage China to adopt appropriate regulatory and enforcement mechanisms to help make sure that its new policies and strategies are most effective.
- In addition, with the growth of emissions trading in the developed world (SO₂ and NO_x in the U.S.; in Europe, a carbon cap-trade system (ETS)), China is now preparing its own emissions trading program, which could effectively complement proposed new regulatory mechanisms and assist in its efforts to comprehensively reduce its greenhouse gas emissions.
- China's emissions cap-trading efforts would be made more effective if America creates its own carbon cap-trading system to foster U.S. carbon emissions reductions.
- Finally, while emissions reduction efforts, both here and in developing countries, are critical, it is important to complement such efforts with other important steps, such as increasing energy efficiencies, encouraging the use of new, cleaner technologies, and helping consumer behavior to adapt and change to new environmental realities.

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Good morning Mr. Chairman and distinguished members of the subcommittee. My name is Jeff Holzschuh, and I am the Vice-Chairman of the Institutional Securities Group at Morgan Stanley, head of our Global Power & Utilities Group and Chairman of our Environmental Committee. I appreciate the opportunity to address the subcommittee today, and I hope that I can provide some additional useful perspectives on developing countries and their steps to reduce greenhouse gas emissions, including how the U.S. and other developed nations are impacting this issue. As developing countries, particularly China, continue their rapid growth trajectories, energy use and demand, including greenhouse gas emissions, have obviously been growing. With global warming increasingly confirmed, per the latest UN and IPCC reports, both the developed and developing world need to take appropriate actions.

Morgan Stanley is a leading global financial services firm and we have undertaken a variety of environmental initiatives recently, including plans to invest in approximately \$3 billion of carbon emissions credits, projects, and other initiatives related to greenhouse gas emissions reduction over the next five years. In addition, we are also one of the most active traders of environmental commodities, including sulfur dioxide, nitrogen oxides, biodiesel, ethanol and weather derivatives. We also work with a variety of industry clients to craft new and innovative approaches to evolving greenhouse gas concerns in

this country and globally. Internationally, our commodities trading division in Europe, for example, has been actively trading EU carbon allowances in the new carbon cap-trade regime (ETS) and working with clients to develop carbon offset projects. We believe that the trend toward more country, regional and international carbon trading is positive and can provide useful incentives and structures to help reduce global greenhouse gas emissions in the future.

There are extensive analyses on greenhouse gas emissions and you have heard detailed testimony on this subject, but from our perspective, let us add a few additional points:

- Morgan Stanley is aware of China's potential impact on greenhouse gas emissions, due to its growing greenhouse emissions and its projected energy demand growth over the next twenty years. Since 1990, Chinese emissions rose 77%, compared to 18% for the U.S., as recently estimated by a World Resources Institute study. Nearly 32% of future global energy demand over the next twenty years will come from China alone, as estimated by recent reports by the International Energy Agency (IEA), McKinsey Global Institute and our own research. India and Latin America, in comparison, are only projected to account for 12% of future global energy demand during that period.
- The Chinese emissions growth is due primarily to its reliance on its abundant coal reserves to satisfy its growing energy demands. According to the IEA's World Energy Outlook 2006, China and India will account for nearly 80% of incremental increase in coal consumption globally through 2030. Today, China is opening a new coal-fired generating plant every week to ten days. Currently, its

coal-fired plants are inefficient, consuming twice as much coal per kilowatt produced compared to U.S. plants, and are lacking in anti-pollution stack scrubbers found in U.S. plants. Other developing countries, such as India, also have inefficient coal plants. We believe that it is in our country's best interest to enable countries like China to use the best available clean coal technologies and help to reduce their greenhouse gas emissions from this key source in coming years.

- China is projected to become the world's largest emitter of greenhouse gas emissions by 2009 and it is now preparing its first national strategy to address climate change and reduce greenhouse gas emissions. Recent evidence suggests that approval of this new strategy may be within the next one - two years.
- The good news is that China is now addressing this issue at a national level. However, China has limited or no regulatory or enforcement mechanisms. Implementation of the new strategy may lag creation of effective regulatory and enforcement agencies.
- An interesting and new twist is the emergence of emissions trading and its potential to assist developing countries like China. For example, China failed to meet its goal to reduce its sulphur dioxide emissions by 10% between 2001 and 2005; instead, emissions increased by 27% over this period. To address this concern, in August 2006, the Chinese Academy of Environmental Planning previewed a new national emissions cap-trade program, which, if similar to the existing U.S.'s emissions trading program for SO₂, could be effective in reducing greenhouse gas emissions within China.

- China's emissions cap-trading efforts would be made more effective if America creates its own carbon cap-trading system to foster U.S. carbon emissions reductions. This subcommittee has received extensive, detailed testimony on how such a U.S. market needs to be structured. We would only add that, given the excellent efforts already in setting up an effective SO₂ emissions market, we have the collective expertise in the U.S. to develop an effective carbon cap-trade system. Ideally, we need to build from the experience of Europe's carbon cap-trade regime (ETS).

We realize this is an extremely complex subject, but encouraging effective regulatory and incentive systems, such as carbon trading, both in our country and in others (developed and developing) would be a key part of an effective global approach. Obviously this is only one piece of a comprehensive greenhouse gas emissions reduction approach, with other actions also needed such as increasing energy efficiencies, promoting clean technologies and assisting consumer behavior to adapt and change energy-use in coming years in both developing and developed countries. For example, Australia's seemingly simple action to hand out more efficient lightbulbs is a small but significant signal to their citizens to change and adapt their energy-use behaviors. Ideally, the U.S. needs to take a leadership position in addressing its own greenhouse gas emissions effectively and comprehensively, in large part to encourage, lead and inspire developing countries, such as China and India, to follow our lead and coordinate to reduce their global greenhouse gas emissions. Morgan Stanley is committed to assisting and being a part of these efforts,

and in helping you to achieve the best outcome for the U.S. and globally. Thank you again for this opportunity to share these views with you.